ABSTRACT

The present invention provides a method and apparatus for assessing ventricular function on a chronic basis using a plurality of electrodes disposed on or about a left ventricle and/or a right ventricle - and optionally, at least one mechanical or metabolic sensor - all operatively electrically coupled to an implantable medical device. The plurality of electrodes are preferably spaced-apart so that at least one electrode is disposed electrical communication with a discrete volume of ventricular tissue. In one embodiment, the discrete volume of tissue is defined by multiple longitudinal and axial planes as known and used in the medical arts. Thus, according to the present invention, at least one electrode couples to appropriate sensing circuitry and essentially provides a localized electrogram (EGM) that, when compared to other EGMs, provides for configurable, localized delivery of therapeutic pacing stimulus, diverse impedance-sensing vectors, various diagnostic information regarding myocardial function and/or anti-tachycardia pacing.